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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/806,204	03/22/2004	David A. Selby	RSW920030089US1	1932
47121 7590 03/17/2009 (SAUL-END) PATENT DOCKETING CLERK IBM Corporation (SAUL-END) C/O Saul Ewing LLP Penn National Insurance Tower 2 North Second Street, 7th Floor Harrisburg, PA 17101				
EXAMINER				
BOYCE, ANDRE D				
ART UNIT		PAPER NUMBER		
3623				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/806,204

Applicant(s)

SELBY, DAVID A.

Examiner

Andre Boyce

Art Unit

3623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 December 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SE-08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. This Final office action is in response to Applicant's amendment filed December 19, 2008. Claims 1, 7, 13, 15 and 23 have been amended. Claims 1-24 are pending.
2. The previously pending objections to claims 7, 15 and 23 have been withdrawn.
3. Applicant's arguments filed December 19, 2008 have been fully considered but they are not persuasive.

Declaration Under 37 CFR § 1.131

4. The declaration filed on December 19, 2008 under 37 CFR 1.131 has been considered but is ineffective to overcome the Quatse et al (US 2005/0010472) reference.

The evidence submitted is insufficient to establish a reduction to practice of the invention in this country or a NAFTA or WTO member country prior to the effective date of the Quatse et al (US 2005/0010472) reference.

As discussed in MPEP 715.07, "[i]n general, proof of actual reduction to practice requires a showing that the apparatus actually existed and worked for its intended purpose. However, 'there are some devices so simple that a mere construction of them is all that is necessary to constitute reduction to practice.' In re Asahi /America

Inc., 68 F.3d 442, 37 USPQ2d 1204, 1206 (Fed. Cir. 1995) (Citing *Newkirk v. Lulejian*, 825 F.2d 1581, 3USPQ2d 1793 (Fed. Cir. 1987) and *Sachs v. Wadsworth*, 48 F.2d 928, 929, 9 USPQ 252, 253 (CCPA 1931). The claimed restraint coupling held to be so simple a device that mere construction of it was sufficient to constitute reduction to practice. Photographs, coupled with articles and a technical report describing the coupling in detail were sufficient to show reduction to practice.). The facts to be established under 37 CFR 1.131 are similar to those to be proved in interference. The difference lies in the way in which the evidence is presented. If applicant disagrees with a holding that the facts are insufficient to overcome the rejection, his or her remedy is by appeal from the continued rejection" (emphasis added).

Following, for actual reduction, as Applicant alleges in this case, MPEP 2138.05 requires "[i]n an interference proceeding, a party seeking to establish an actual reduction to practice must satisfy a two-prong test: (1) the party constructed an embodiment or performed a process that met every element of the interference count, and (2) the embodiment or process operated for its intended purpose." *Eaton v. Evans*, 204 F.3d 1094, 1097, 53 USPQ2d 1696, 1698 (Fed. Cir. 2000). The same evidence sufficient for a constructive reduction to practice may be insufficient to establish an actual reduction to practice, which requires a showing of the invention in a physical or tangible form that shows every element of the count. *Wetmore v. Quick*, 536 F.2d 937, 942, 190 USPQ 223, 227 (CCPA 1976). For an actual reduction to practice, the invention must have been sufficiently tested to

demonstrate that it will work for its intended purpose, but it need not be in a commercially satisfactory stage of development. See, e.g., *Scott v. Finney*, 34 F.3d 1058, 1062, 32 USPQ2d 1115, 1118-19 (Fed. Cir. 1994) (citing numerous cases wherein the character of the testing necessary to support an actual reduction to practice varied with the complexity of the invention and the problem it solved)."

As such, with respect to prong (1), Applicant must have constructed an embodiment or a performed a process that meets all the limitations of claims 1-24. Here, Applicant submits an invention disclosure containing a title page, 6 redacted pages, and 7 pages disclosing a method of optimisation of marketing resources. However, Applicant does not submit, inter alia, evidence indicating that Applicant constructed an embodiment or a performed a process for selecting an optimal set of events to be performed, where each event has a value and where the selection of any event reduces or leaves unchanged the value of unselected events, comprising the following computer-implemented steps: performing a first sort on all unselected events to form a pending event list, so that the events are ordered sequentially by their values, with the highest valued event being at the top of the pending event list; selecting the highest valued unselected event upon the occurrence of a predetermined trigger; recomputing the values of each event after the selection of the highest valued unselected event; and moving the highest valued unselected event, after performance of the recomputing step, to the top of the pending event list without performing a second sort of the entire pending event list.

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 1-8 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

In order for a method to be considered a "process" under §101, a claimed process must either: (1) be tied to a particular machine or apparatus, or (2) transform a particular article to a different state or thing. *In re Bilski*, 545 F.3d 943, 88 USPQ2d 1385 (Fed. Cir. 2008). If neither of these requirements is met by the claim, the method is not a patent eligible process under §101 and is non-statutory subject matter.

With respect to amended independent claim 1 the claim language recites the steps of performing a first sort, selecting the highest valued unselected event, recomputing the values etc., however the claim language does not include the required tie or transformation. Moreover, amended claim 1 recites "[a] computer-implemented method...comprising the following computer-implemented steps," is considered a nominal recitation, since a preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

Claims 7-8 are rejected based upon the same rationale, wherein the claim language does not include the required tie or transformation.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 1-4, 7, 9-12, 15, 17-20 and 23 are rejected under 35 U.S.C. 102(e) as being anticipated by Quatse et al (US 2005/0010472).

As per claim 1, Quatse et al disclose a method for selecting an optimal set of events to be performed, where each event has a value and where the selection of any event reduces or leaves unchanged the value of unselected events (i.e., limited lists and tree structured lists of promotional offers to targeted customers, ¶ 0018), comprising: performing a first sort on all unselected events to form a pending event list, so that the events are ordered sequentially by their values, with the highest-valued event being at the top of the pending event list (i.e., ordered list of offers which are ordered by score, ¶ 0018); selecting the highest-valued unselected event upon the occurrence of a predetermined trigger (i.e., only a limited number of offers having the highest estimated probability are allocated to distribution list, ¶ 0018);

recomputing the values of each event after the selection of the highest-valued unselected event (i.e., targeting process uses statistical methods and rule based inferences to score each promotional offer, ¶ 0018); and moving the highest-valued unselected event, after performance of the recomputing step, to the top of the pending event list without performing a second sort of the entire pending event list (i.e., only a limited number of offers having the highest estimated probability are allocated to distribution list, ¶ 0018).

As per claim 2, Quatse et al disclose the selecting, recomputing, and moving steps are iteratively performed until the occurrence of a predetermined condition (i.e., only a limited number of offers having the highest estimated probability are allocated to distribution list complying with constraints including limits on the number of offers, ¶ 0018).

As per claim 3, Quatse et al disclose said predetermined condition comprises the selection of a predetermined number of events (i.e., constraints including limits on the number of offers, ¶ 0018).

As per claim 4, Quatse et al disclose each event has a cost associated with its selection, whereby said predetermined condition comprises the reaching of a predetermined cost total for said selected events (i.e., only distribution of promotional offers likely to be effective, thus reducing the cost, ¶ 0014).

As per claim 7, Quatse et al disclose the value of each event comprises its each events expected gain (i.e., targeting process uses statistical methods and rule based inferences to score each promotional offer, ¶ 0018).

Claims 9-12 and 15 are rejected based upon the same rationale as the rejections of claims 1-4 and 7, respectively, since they are the system claims corresponding to the method claims.

Claims 17-20 and 23 are rejected based upon the same rationale as the rejections of claims 1-4 and 7, respectively, since they are the computer program product claims corresponding to the method claims.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 5, 6, 8, 13, 14, 16, 21, 22 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Quatse et al (US 2005/0010472).

As per claim 5, Quatse et al does not explicitly disclose said moving step comprises the performance of a truncated bubble sort on the events based on their recomputed values. However, Quatse et al disclose segmenting (i.e., sorting) based upon well known clustering algorithms (§ 0048). Moreover, truncated bubble sorts are old and well known, and it would have been obvious to one of ordinary skill in the art to include performance of a truncated bubble sort in the system of Quatse et al, since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did

separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

As per claim 6, Quatse et al does not explicitly disclose said moving step comprises the performance of a binary chop sorting process on the events based on their recomputed values. However, Quatse et al disclose segmenting (i.e., sorting) based upon well known clustering algorithms (§ 0048). Moreover, binary chop sorting is old and well known, and it would have been obvious to one of ordinary skill in the art to include performance of a binary chop sorting process in the system of Quatse et al, since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

As per claim 8, Quatse et al does not explicitly disclose said recomputing process comprises performing a saturation process on said unselected events. However, Quatse et al disclose segmenting based upon well known clustering algorithms (§ 0048). Moreover, performing a saturation process is old and well known, and it would have been obvious to one of ordinary skill in the art to include performing a saturation process in the system of Quatse et al, since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

Claims 13, 14 and 16 are rejected based upon the same rationale as the rejections of claims 5, 6 and 8, respectively, since they are the system claims corresponding to the method claims.

Claims 21, 22 and 24 are rejected based upon the same rationale as the rejections of claims 5, 6 and 8, respectively, since they are the computer program product claims corresponding to the method claims.

Conclusion

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andre Boyce whose telephone number is (571)272-6726. The examiner can normally be reached on 9:30-6pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Beth Boswell can be reached on (571) 272-6737. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Andre Boyce/
Primary Examiner, Art Unit 3623
March 14, 2009